1. PURPOSE

1.1. The purpose of this policy is to laid down guidelines in monitoring patients after administration of drug and to identify medications which require closed monitoring after administration for all healthcare providers involved in the prescribing, dispensing, and administration of these medications

2. SCOPE

2.1. This Policy and Procedure is applicable to all Medications prescribed to a Patient of Apollo Hospital, Secunderabad.

3. DEFINITION

3.1. NIL

4. RESPONSIBILITIES

4.1. Doctors, Nurses, Pharmacist are responsible to implement this policy and procedure.

5. POLICY

Apollo Hospital Secunderabad identifies the following process for monitoring patients after medication administration

5.1. Patient's are to be monitored after Administration of medication by Nurse / Treating Doctor or his / her Team Member, DMO, as appropriate.

5.2. The monitoring can either be Passive method or Active method or both, as appropriate.

Passive method is if patient tells about the symptoms, active method is if doctor / nurse enquire with the patient every time.

5.3. The patients' Drug Chart shall be checked for the last recorded dose of medication before administering the prescribed drug. The effect of the medication on the patient's physical or mental status shall be observed and recorded. Monitored symptoms are to be documented in the case sheet

If the patient reports an allergy to an ordered medication, the dose is omitted and the physician is notified immediately. Any unusual, unexpected, or significant patient reaction to any medication shall be reported to the physician immediately and Incident report shall be prepared and sent the Quality Systems.

If the patient is hemodynamically unstable after administration of medication, the physician shall be notified.

5.4. The planning and provision of care shall be based on the assessment of individual patients' and on the patient's response to actual or potential alteration to health. Individual patient's care is planned and documented in the case file and the appropriate clinical record forms used. Care is modified, as indicated by a change in the patient's condition in response to the practice of evidence based diagnosis, periodic assessment and therapeutic delivery and this is reflected in the care plan.

5.5. Documentation including, care plan, pertinent problems/needs, and all necessitated procedures performed, delineation of age-appropriate intervention, response to care, outcome of care etc. and shall be appropriately recorded in the patients' medical record. The caregiver shall be identified by name and signature.

5.6. Medication at all levels shall be accomplished by competent, trained staff. They are provided with job descriptions, legal parameters and related policies to perform their specific assigned tasks.

The following list of high alert medications were identified where close monitoring is required when administered

Intravenous magnesium sulphate

Potassium chloride

Intravenous sodium chloride, concentrations greater than 0.9%

Narcotics

Neuromuscular blockers

Propofol

Look Alike and Sound Alike (LASA) Drug

Narrow Therapeutic Index Drugs (Warfarin,Digoxin,Lithium Carbonate,Carbamazepine,Phenytoin and Sodium Valproate)

5.7. Only when the physician is unable to attend to the patient and write the order, and a delay in ordering the medication would compromise patient safety and care, will verbal or telephone medication orders be permitted.

5.8. An independent double-check is required prior to the administration of any dose which requires use of the following high –alert medications

Intravenous magnesium sulphate

Potassium chloride

Intravenous sodium chloride, concentrations greater than 0.9%

Narcotics

Neuromuscular blockers

Propofol

Look Alike and Sound Alike (LASA) Drug

Narrow Therapeutic Index Drugs (Warfarin,Digoxin,Lithium Carbonate,Carbamazepine,Phenytoin and Sodium Valproate)

5.9. Documentation of independent double-checks will be completed on the medication chart and include provider initials and time of double-check

5.10. When an independent double check cannot be performed, the professional staff to be aware of and alerted to all high risk medications.

5.11. Verification is required at shift change and transfer of care for any intravenous or epidural infusions of high-alert medications

5.12. Documentation of verification will be completed on the medication chart and include provide initials and time of verification.

5.13. Commercially packaged or pharmacy prepared pre-mixed solutions of high-alert medications will be used when available

5.14. The number of concentrations and /or volume options available for high-alert medications on patient areas will be limited

5.15. All high-alert medications administered as intravenous or epidural infusions will be administered in standardized concentrations for adult patients. If a concentration other than the standardized concentration is ordered, it must be identified as such.

5.16. All premixed epidural solutions will be clearly labeled " For Epidural Infusion Only" and stored separately from all intravenous solutions

5.17. Insulin (refrigerated) and heparin (room temperature) will be stored separately

Procedure

1. Below are the high – alert medications currently used in our hospital which need close monitoring post administration of these drugs .
2. **Intravenous magnesium sulphate**
3. **Potassium chloride**
4. **Intravenous sodium chloride, concentrations greater than 0.9%**
5. **Narcotics**
6. **Neuromuscular blockers**
7. **Propofol**
8. **Look Alike and Sound Alike (LASA) Drug**
9. **Narrow Therapeutic Index Drugs (Warfarin,Digoxin,Lithium Carbonate,Carbamazepine,Phenytoin and Sodium Valproate)**
10. Caution labels shall be affixed on the concentrated electrolytes for their easy identification before dispensing or administration.
11. Narcotics shall be prescribed, dispensed and administered as outlined in the policy for narcotic drugs.
12. Narcotic drugs can be kept in no imprest stocks other than that of Emergency and ICUs. They shall be dispensed to the wards only for the patients requiring them.
13. The comprehensive LASA Drug list shall be displayed at all the patient care areas and the IP Pharmacy.

14. The pair of LASA Drugs shall be kept apart at designated places in the IP Pharmacy to minimize chances of dispensing errors.
15. An individualized LASA Drug list shall be displayed at each of the imprest stocks.
16. LASA Drug errors in these areas shall be minimized either by keeping the pair of LASA Drugs apart or by placing a separate colored label indicating **"Look Alike Drug"** or **"Sound Alike Drug"** as the case may be.
17. **Dispensing:** These specified medications shall be dispensed as available in the form of standard readymade preparations with specified labels after cross verification.
    i. **Administration:** Administration shall be done by checking the patient identification and cross checking the medication chart for dose, unit, route, frequency and time before administering the drug. There shall a double check mechanism by two nurses prior to administration.
    ii. **Monitoring:** Monitoring of the concentrated electrolyte for storage, dispensing and administration shall be done in every step of the process by the ward pharmacists, senior staff nurse, PAT and doctor on the floor and all the standard precautions shall be taken to prevent any inadvertent use.